

FIG 2

Element	Attribute	Times	Examples
lbk			
	version		1.0
+-identifier		1	Takara Sushi Bar
+-period		1	-
	type		event
	start		2000-12-17 08:00:00.123 -06:00
	end		2000-12-21 16:00:00.456 -06:00
+-wide.area.coordinates		1	-
	geodetic.datum		wgs84
+-latitude		1	+38.42.28.123
	format		idms
+-longitude		1	-112.37.43.123
	format		idms
+-altitude		1	125
	unit		meter
+-datetime		1	2000-12-01 17:35:12.567 -08:00
+-accuracy		1	-
+-horizontal.error		1	10
	unit		meter
+-vertical.error		1	15
	unit		meter
+-time.error		1	0.07 (70 ms)
+-local.area.coordinates		0/1	-
	coord.system	1	cartesian - 3D
+-coordinate		1-4	
	type		offset
	unit		meter
+-datetime		1	2000-12-01 17:35:12.567 -08:00
+-accuracy		1	-
+-horizontal.error		1	1
	unit		meter
+-vertical.error		1	1
	unit		meter
+-time.error		1	0.07 (70 ms)
+-wide.area.address		0/1	-
+-number		1	781
+-street		1	William
+-intersection		0/1	Duke
+-city		1	Montreal
+-state		0/1	Quebec
+-country		0/1	Canada
+-postal-code		0/1	H3C 1N8
+-local.area.address		0/1	C-345
+-contact.info		0-	-
	xml:lang		en
	note		Contact for technical support
+-phone		0-	15148665555+229
+-fax		0-	15148668584
+-email		0-	xxx@yyy.zzz
+-lbk.metadata		0-	-
	type		text, keyword, image, video, ...
	src		video/lbkdesc.mov
	xml:lang		fr
+-external.services		0/1	Any well-formed XML document that link external resources to the LBK
+-change.log		1-	-
+-datetime		1	2000-12-13 12:23:46.234 -09:00
+-author		0/1	Mathieu Boisclair
+-system		0/1	Nomad Logic LBSS R.1

(#1) 0-: 0 or more 1-: 1 or more 0/1: 0 or 1 1-4: 1 to 4

FIG 3

```

<!ENTITY % NAMESPACE
    "xmlns:lbk CDATA #FIXED 'http://www.nomadlogic.com/dtd/lbk1.0.dtd'">

<!ENTITY % LOG "lbk:name, lbk:datetime, lbk:system">

<!ELEMENT lbk:root
    (lbk:identifier, lbk:event?, lbk:description,
     lbk:services*, lbk:contact?,
     lbk:coordinates, lbk:log)>
<!ATTLIST lbk:root %NAMESPACE;>

    <!ELEMENT lbk:identifier EMPTY>
        <!ATTLIST lbk:identifier value CDATA #REQUIRED>

    <!ELEMENT lbk:event (lbk:start, lbk:end)>
        <!ELEMENT lbk:start EMPTY>
        <!ATTLIST lbk:start
            format (dd:yy:yy) #REQUIRED
            value CDATA #REQUIRED>
        <!ELEMENT lbk:end EMPTY>
        <!ATTLIST lbk:end
            format (dd:yy:yy) #REQUIRED
            value CDATA #REQUIRED>

    <!ELEMENT lbk:description
        (lbk:text?, lbk:voice?, lbk:image?, lbk:video?, lbk:keywords?)>
        <!ELEMENT lbk:text EMPTY>
        <!ATTLIST lbk:text
            xml:lang NMTOKEN #REQUIRED
            value CDATA #REQUIRED>
        <!ELEMENT lbk:voice EMPTY>
        <!ATTLIST lbk:voice
            xml:lang NMTOKEN #REQUIRED
            uri CDATA #IMPLIED>
        <!ELEMENT lbk:image EMPTY>
        <!ATTLIST lbk:image
            uri CDATA #IMPLIED>
        <!ELEMENT lbk:video EMPTY>
        <!ATTLIST lbk:video
            xml:lang NMTOKEN #REQUIRED
            uri CDATA #IMPLIED>
        <!ELEMENT lbk:keywords EMPTY>
        <!ATTLIST lbk:keywords
            xml:lang NMTOKEN #REQUIRED
            value CDATA #REQUIRED>

        <!ELEMENT lbk:services EMPTY>
        <!ATTLIST lbk:services
            xml:lang NMTOKEN #REQUIRED
            note CDATA #IMPLIED
            value CDATA #REQUIRED>
        <!ELEMENT lbk:contact (lbk:phone*, lbk:fax?, lbk:email*)>
        <!ATTLIST lbk:contact
            xml:lang NMTOKEN #IMPLIED
            note CDATA #IMPLIED
            name CDATA #IMPLIED>
            <!ELEMENT lbk:phone EMPTY>
            <!ATTLIST lbk:phone value CDATA #REQUIRED>
            <!ELEMENT lbk:fax EMPTY>
            <!ATTLIST lbk:fax value CDATA #REQUIRED>
            <!ELEMENT lbk:email EMPTY>
            <!ATTLIST lbk:email value CDATA #REQUIRED>

    <!ELEMENT lbk:coordinates
        (lbk:local?, lbk:global, lbk:address?)>

```

```

<!ELEMENT lbk:global
  ((lbk:latitude, lbk:longitude, lbk:altitude?), lbk:accuracy?
<!ATTLIST lbk:global datum (wgs84|xxx) #IMPLIED>
  <!ELEMENT lbk:latitude EMPTY>
  <!ATTLIST lbk:latitude
    format (ddmm.mmmmmmm|-ddmm.mmmmmmm|d|-d) #REQU
    value CDATA #REQUIRED>
  <!ELEMENT lbk:longitude EMPTY>
  <!ATTLIST lbk:longitude
    format (ddmm.mmmmmmm|-ddmm.mmmmmmm|d|-d) #REQU
    value CDATA #REQUIRED>
  <!ELEMENT lbk:altitude EMPTY>
  <!ATTLIST lbk:altitude
    unit (cm|m|in|ft) #REQUIRED
    value CDATA #REQUIRED>

<!ELEMENT lbk:local
  ((lbk:cartesian2D|lbk:cartesian3D|lbk:spherical), lbk:accura
  <!ELEMENT lbk:cartesian2D
    ((lbk:xaxis, lbk:yaxis))>
  <!ATTLIST lbk:cartesian2D unit (cm|m|in|ft) #REQUIRED>
  <!ELEMENT lbk:cartesian3D
    ((lbk:xaxis, lbk:yaxis, lbk:zaxis))>
  <!ATTLIST lbk:cartesian3D unit (cm|m|in|ft) #REQUIRED>
    <!ELEMENT lbk:xaxis EMPTY>
    <!ATTLIST lbk:xaxis value CDATA #REQUIRED>
    <!ELEMENT lbk:yaxis EMPTY>
    <!ATTLIST lbk:yaxis value CDATA #REQUIRED>
    <!ELEMENT lbk:zaxis EMPTY>
    <!ATTLIST lbk:zaxis value CDATA #REQUIRED>
  <!ELEMENT lbk:spherical
    ((lbk:rho, lbk:phi, lbk:theta))>
  <!ATTLIST lbk:spherical unit (deg|rad) #REQUIRED>
    <!ELEMENT lbk:rho EMPTY>
    <!ATTLIST lbk:rho value CDATA #REQUIRED>
    <!ELEMENT lbk:phi EMPTY>
    <!ATTLIST lbk:phi value CDATA #REQUIRED>
    <!ELEMENT lbk:theta EMPTY>
    <!ATTLIST lbk:theta value CDATA #REQUIRED>

    <!ELEMENT lbk:accuracy
      (lbk:horizontal?, lbk:vertical?)>
      <!ATTLIST lbk:accuracy unit (cm|m|in|ft) #RE
      <!ELEMENT lbk:horizontal EMPTY>
      <!ATTLIST lbk:horizontal value CDATA #REQUIR
      <!ELEMENT lbk:vertical EMPTY>
      <!ATTLIST lbk:vertical value CDATA #REQUIRED>

<!ELEMENT lbk:address
  (lbk:number, lbk:street, lbk:intersection?, lbk:city,
  (lbk:state?|lbk:province?), lbk:country, lbk:zip?, lbk:suit
  <!ELEMENT lbk:number EMPTY>
  <!ATTLIST lbk:number value CDATA #REQUIRED>
  <!ELEMENT lbk:street EMPTY>
  <!ATTLIST lbk:street value CDATA #REQUIRED>
  <!ELEMENT lbk:intersection EMPTY>
  <!ATTLIST lbk:intersection value CDATA #REQUIRED>
  <!ELEMENT lbk:city EMPTY>
  <!ATTLIST lbk:city value CDATA #REQUIRED>
  <!ELEMENT lbk:state EMPTY>
  <!ATTLIST lbk:state value CDATA #REQUIRED>
  <!ELEMENT lbk:province EMPTY>
  <!ATTLIST lbk:province value CDATA #REQUIRED>
  <!ELEMENT lbk:country EMPTY>

```

FIG 3a

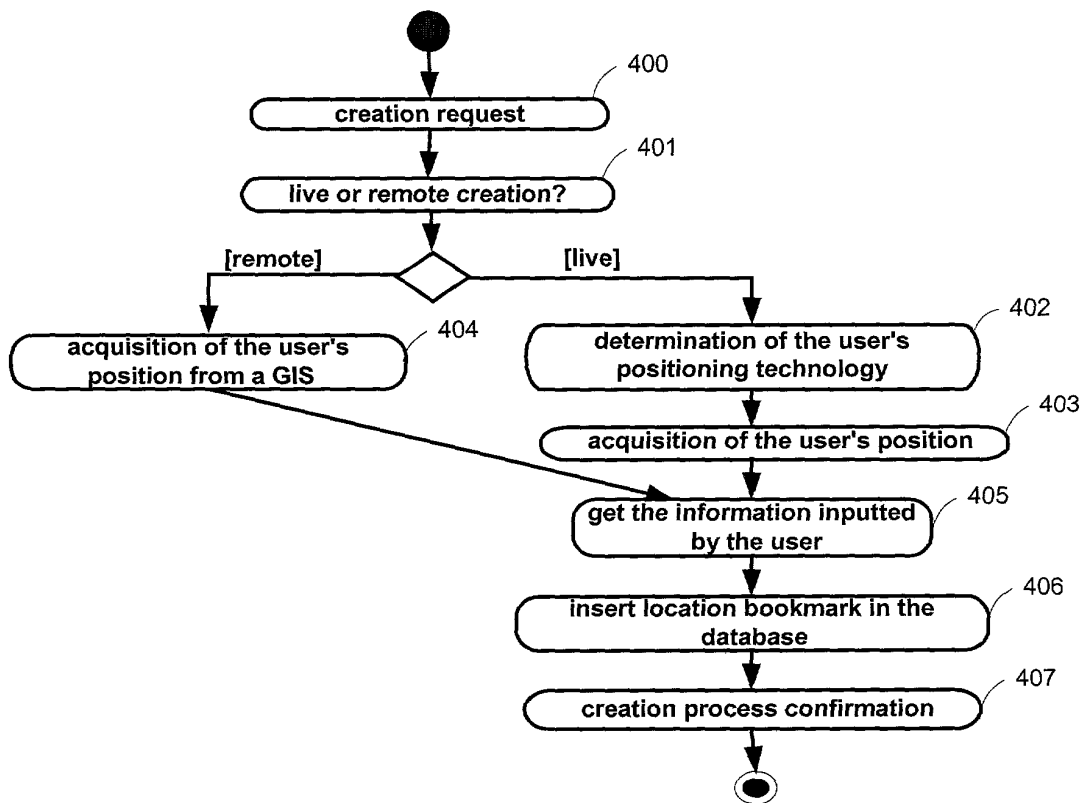


FIG 4

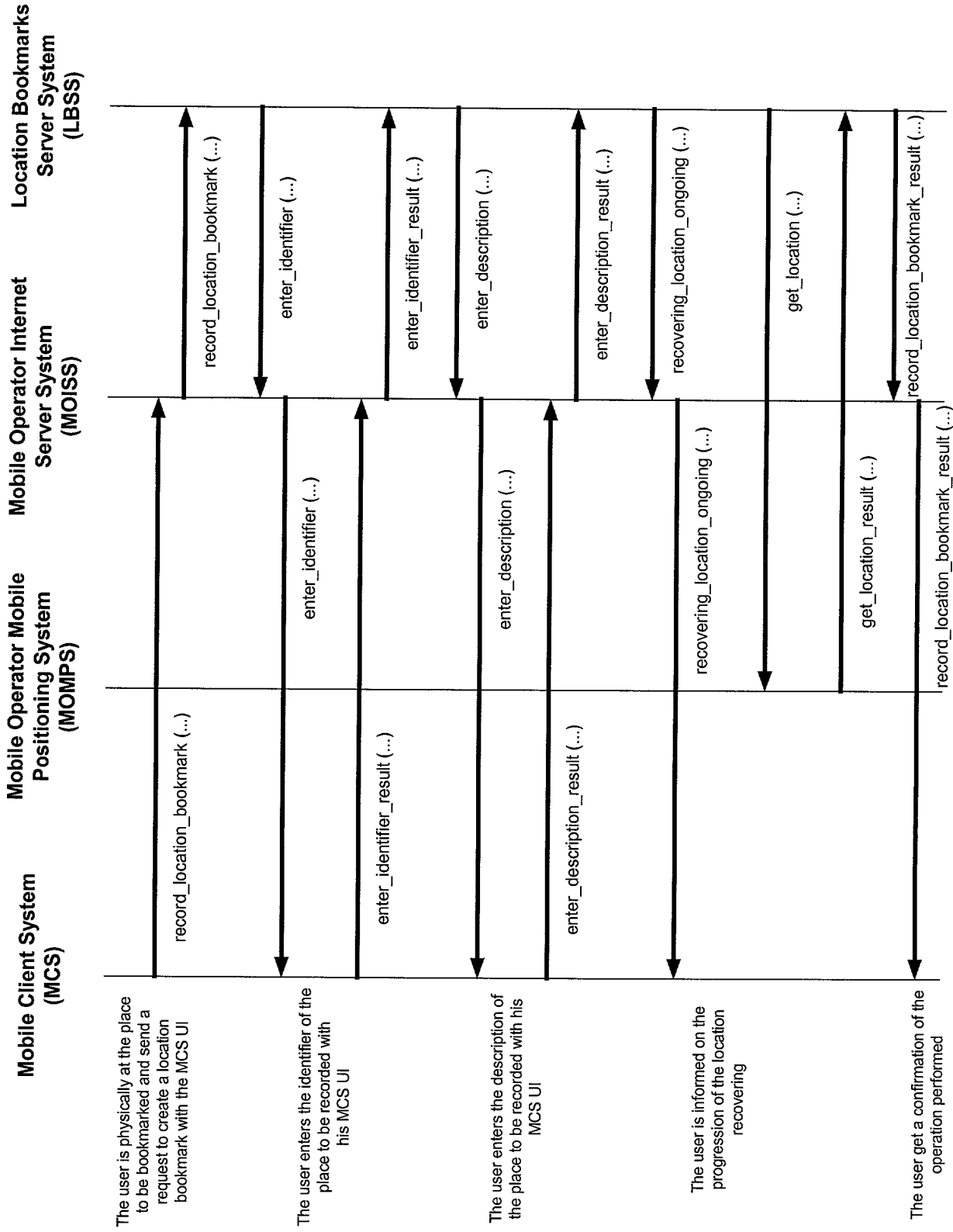


Fig 4a

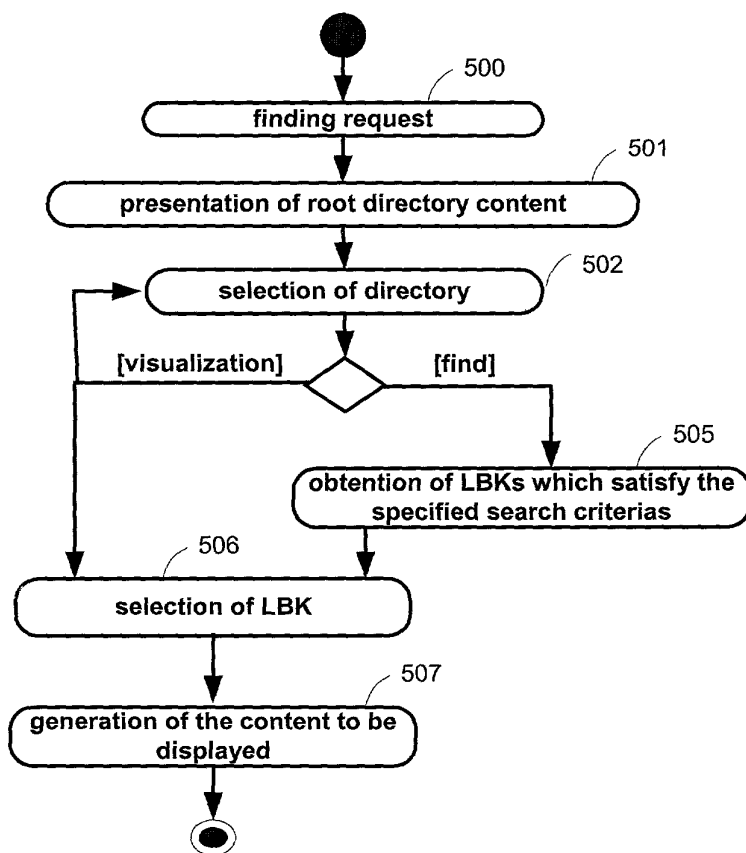


FIG 5

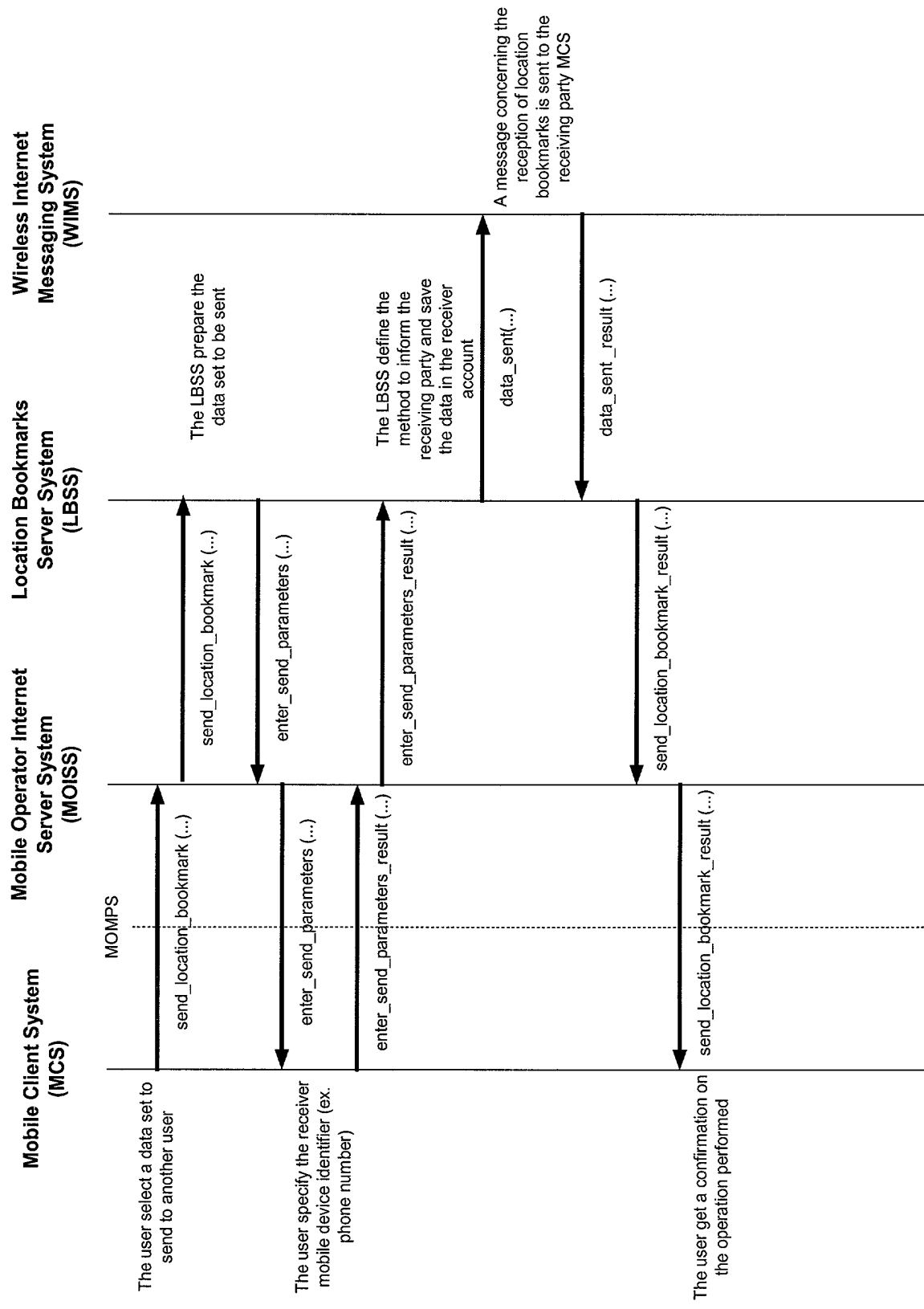


FIG 6

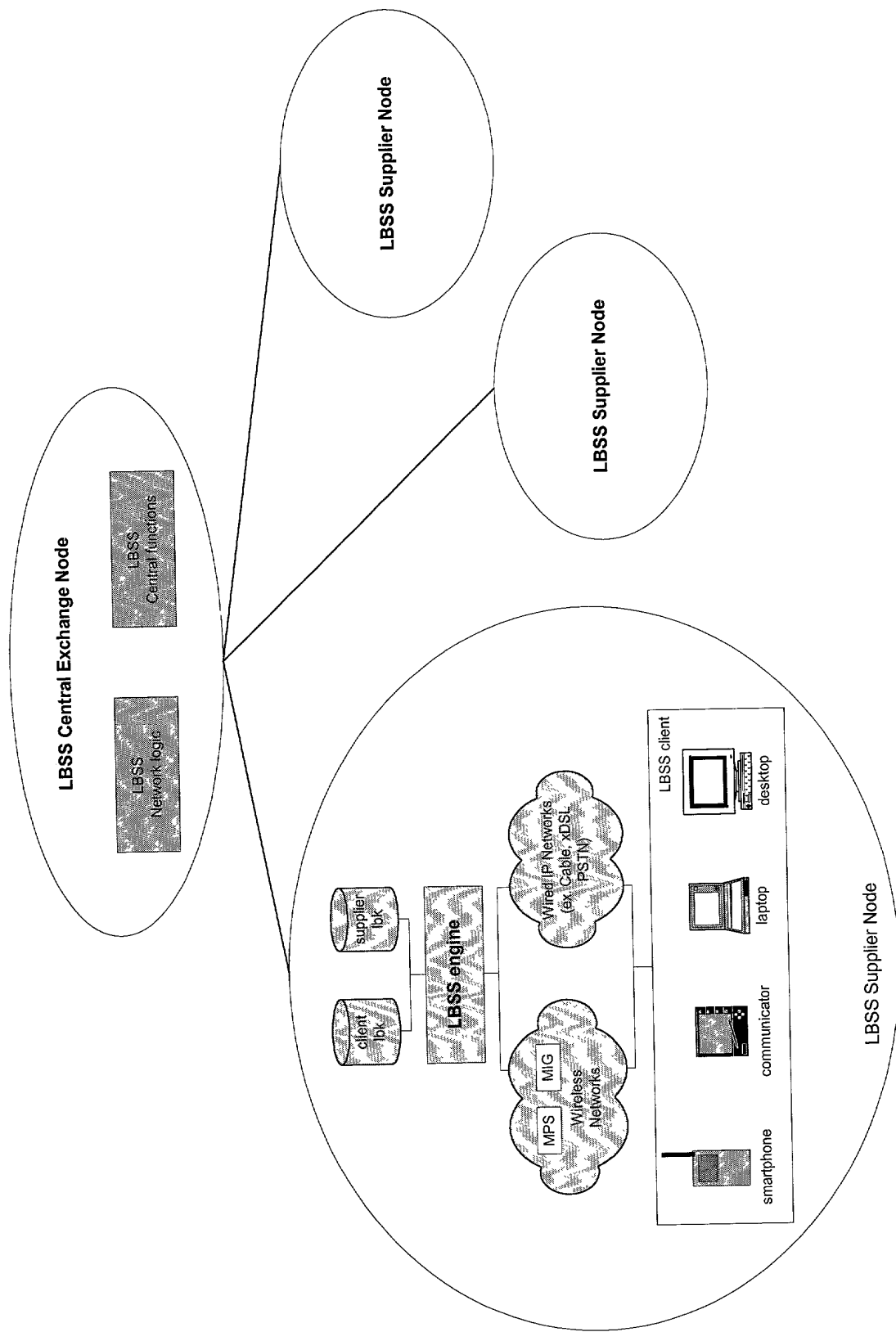


FIG 7

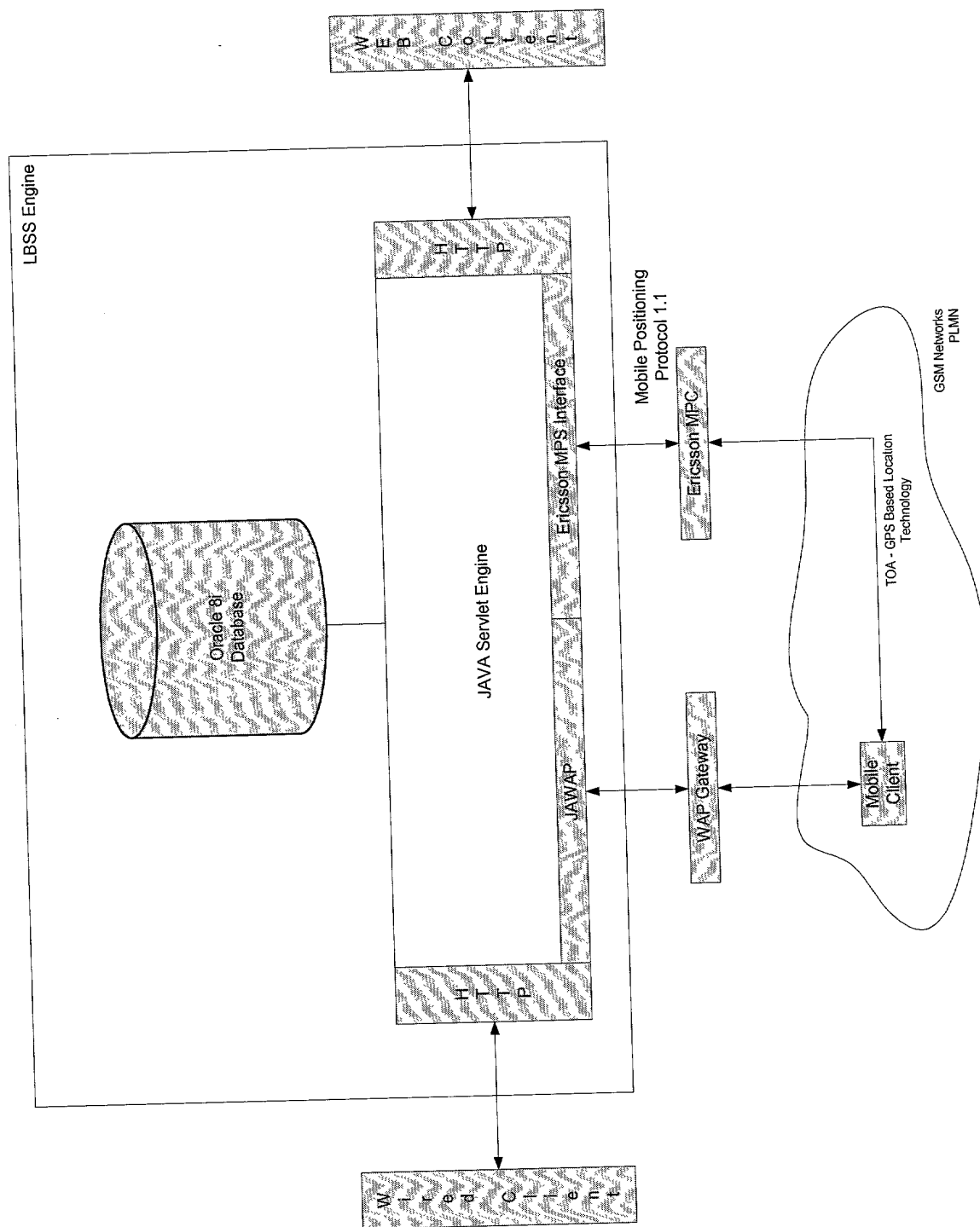


FIG 8

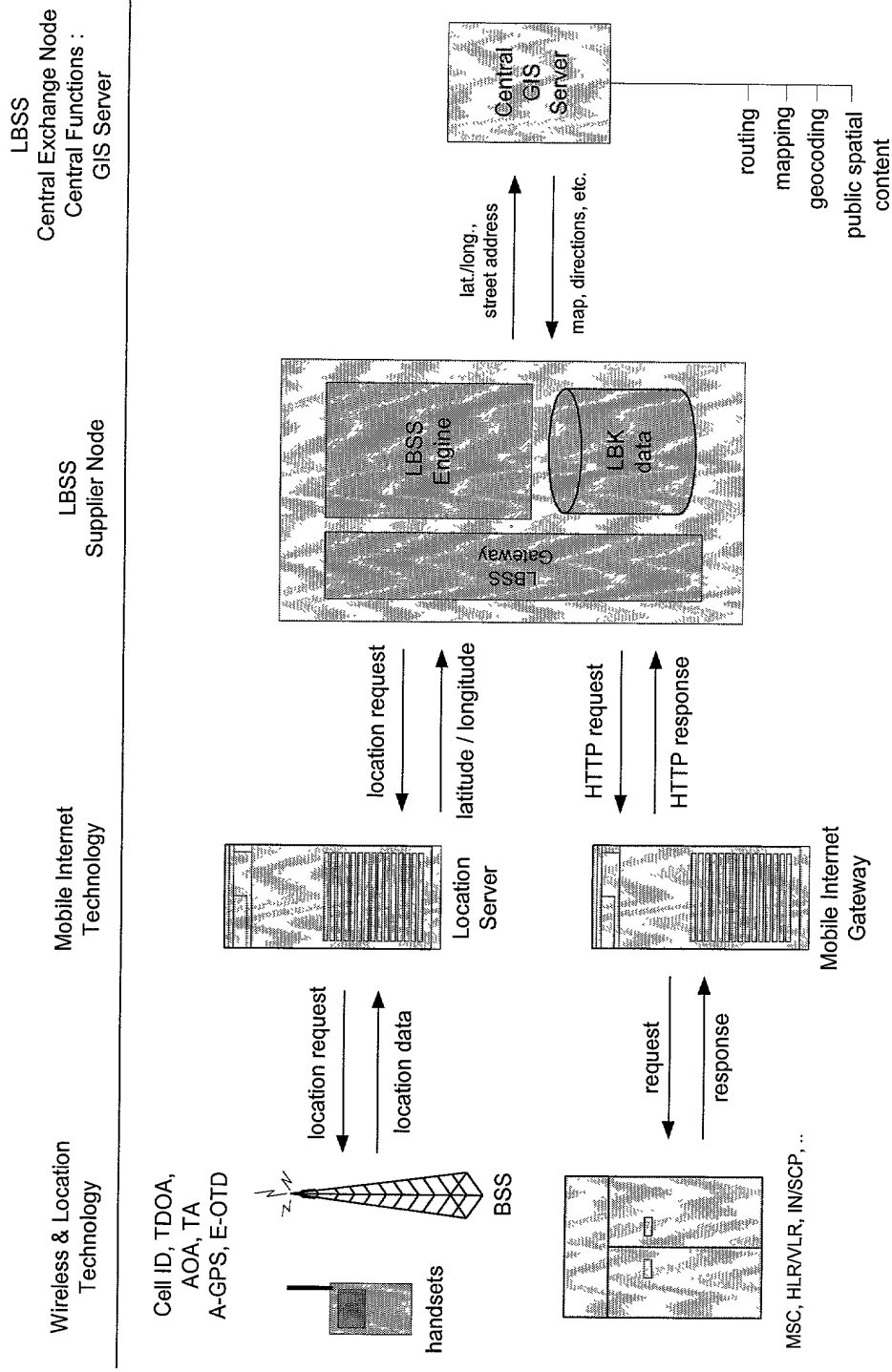


FIG 9

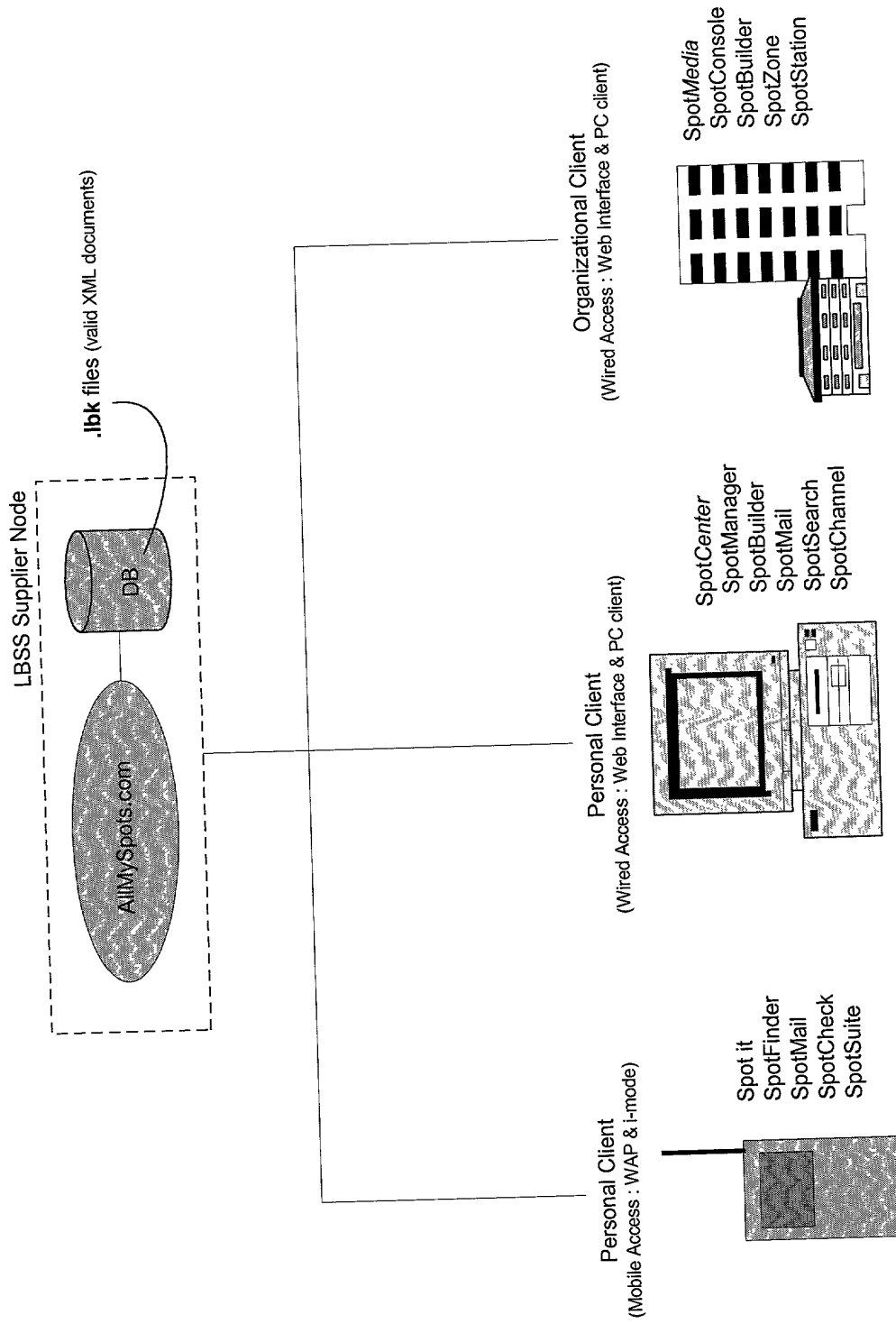


FIG 10

start

1- Folder Selection

ex. MySpots/Restaurant/Sushi -- Spot

it

2- Name Entry

Enter name

1- voice agent

Name .

Go Submit

Intelligent Voice Recognition Engine (IVRE)
ex. "T", "A", "K", "A", "R", "A"

3- Details Entry

"Takara" Details

1- (none) ✓

2- search keywords

3- text description

4- vocal description

5- image

Go Submit

Once visited

TBD

"Takara" search keywords

1- voice agent

keywords :

k1 (restaurant)

k2 (sushi)

k3 (choice)

k4 (fast)

k5 (parking)

k4 (intimate)

Go Submit

Intelligent Voice Recognition Engine (IVRE)
ex. choice, fast

from the user path

from the IVRE

from the Keypad

"Takara" text description

comment :

tel :

Go Submit

from the Keypad

"Takara" vocal description

Dictation in 5-4-3-2-1 Go

stop

4- Confirmation

confirmation panel

end

FIG 11

Spot it

FOU280" 9587E660

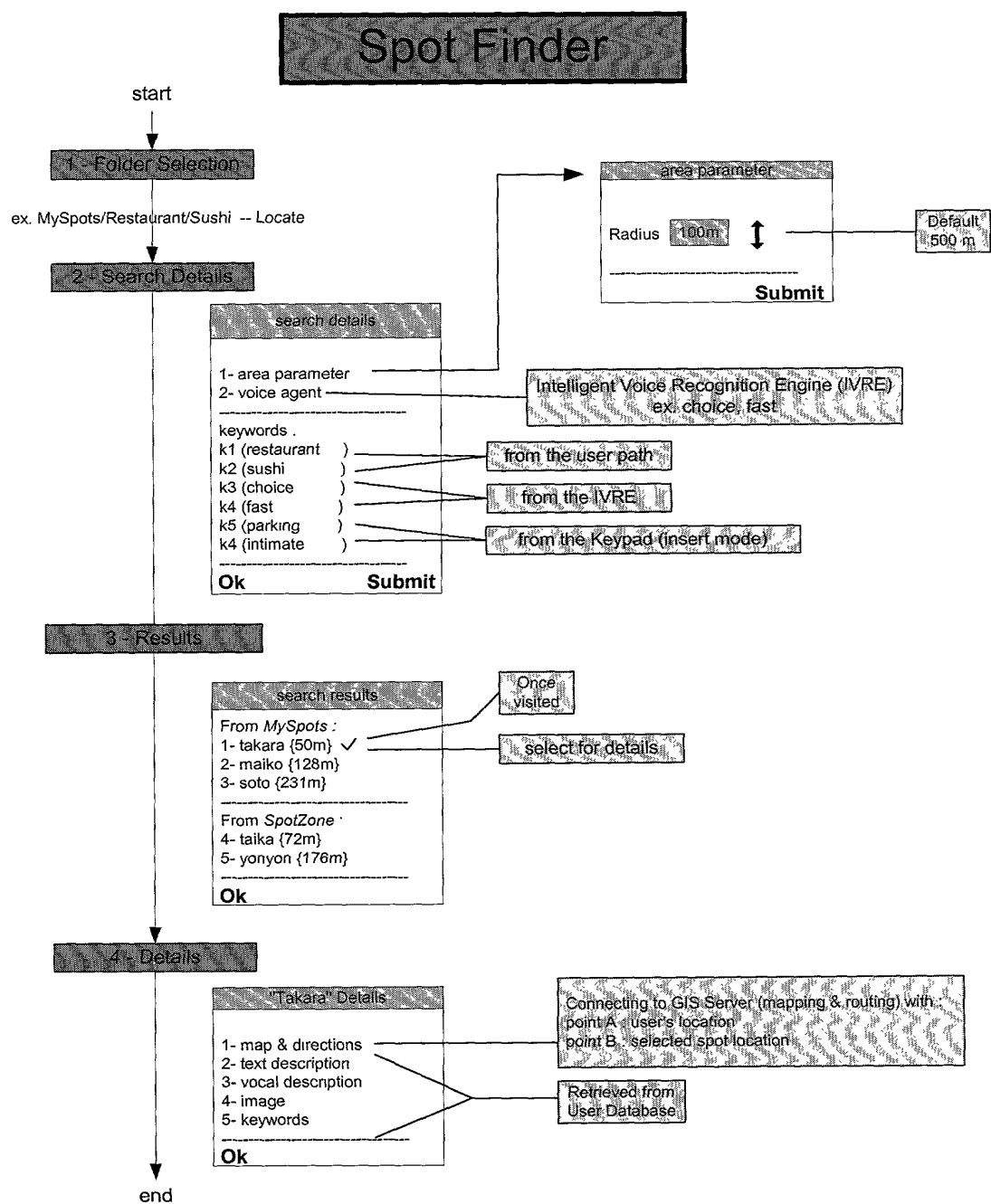


FIG 12

09931696 032001

Spot List Name :

Area Covered :

List description :

List keywords :

field 1 : area parameter

field 2 : specific zone

Enter your description here then press add to list

Enter your list keywords here. (ex: keyword1;keyword2;...)

Created Spots

spot 1 : Takara
spot 2 : Maiko
spot 3 : Solo
spot 4 :

Add to MySpots

Spot Name :

Address / Street :

City :

State / Province :

ZIP / Postal Code :

Tip: Enter as much of the location as you know.
You must choose the country and fill in at least one other field.

Get Map & Spot coordinates

Spot coordinates :

Latitude
Longitude

Spot description :

Spot keywords :

MAPQUEST

100m
300ft

Eastville Ave
Côte St Lg Châ
Colinbrook Ave
Orphelmat Road
Fairfield Ave
Old Orchard Ave
Stouard Ave

© 1999 MapQuest.com, Inc. © 1999 Navigation Technologies

Enter your text description here then press add to list

Add image/audio/video

Enter your Spot Keywords here. (ex: keyword1;keyword2;...) - optional

Add to list

FIG 13

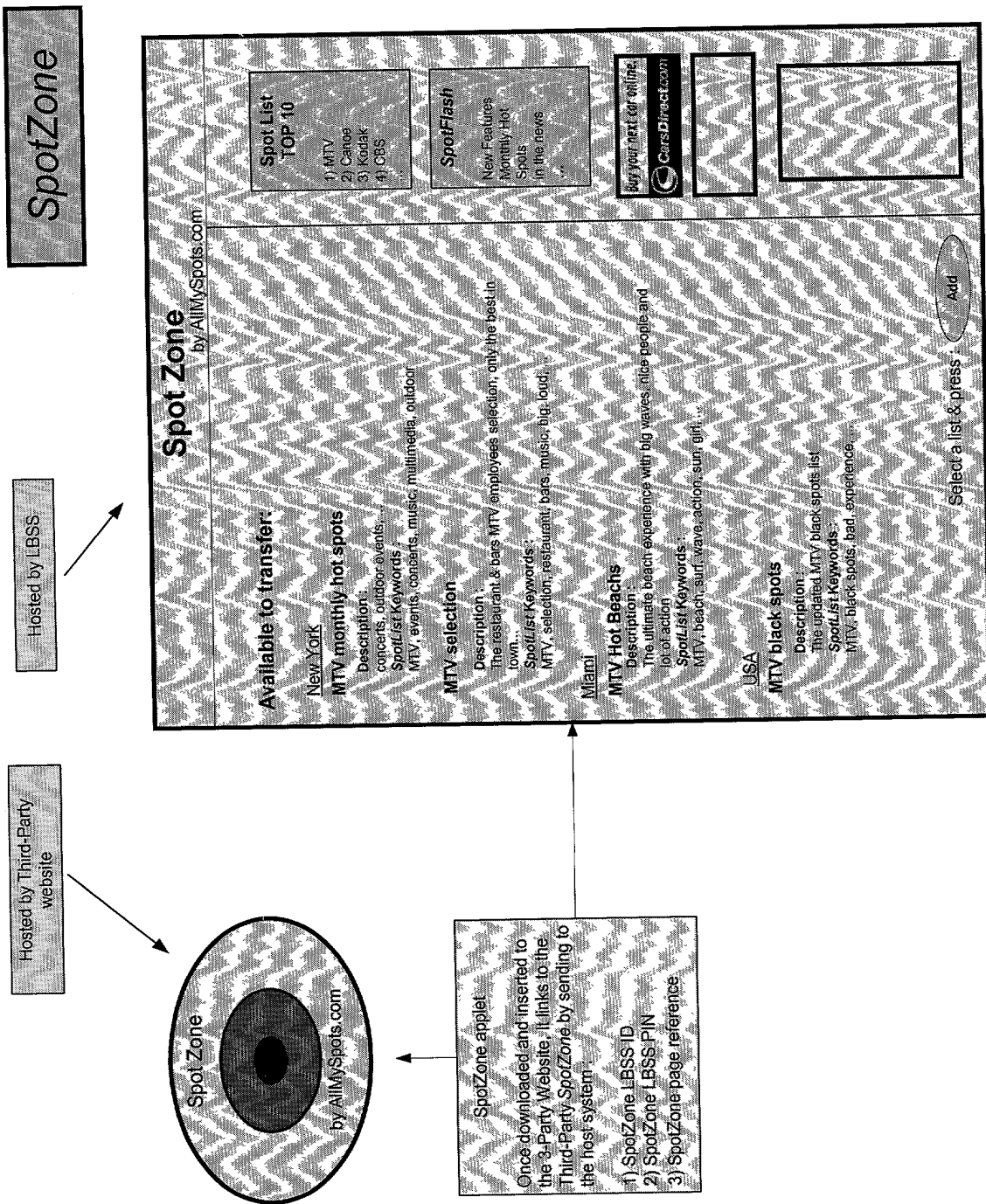


FIG 14